# Appendix B

# Mitigation Measures included in the Alternatives Analyzed

### **Both Action Alternatives**

## **Permits and Regulations**

- The project will implement conditions included in any Hydraulic Project Approval (HPA) permit provided by WDFW.
- Mitigation required by Snohomish County's Critical Areas Ordinance would be developed in coordination with Snohomish County staff.

#### **Stormwater Control**

- A site-specific Spill Prevention, Control, and Countermeasures (SPCC) Plan will be developed and implemented to ensure that all pollutants are controlled and contained.
- The project will implement stormwater control according to the State of Washington NPDES Storwater Construction guidelines.
- In the event of unexpected rainfall, all concrete, paving, paint, paint remover, or other potentially harmful chemicals will be contained and prevented from leaving the construction area.
- Fueling and maintenance of equipment will occur more than 300 feet from surface water or wetlands, to the extent practical.

### **Sediment Control**

- An Erosion and Sedimentation Control Plan (ESCP) will be prepared and implemented for all projects that require earth-moving, vegetation removal, or soil compaction. If the project includes excavation below the water table, the turbid water will be de-watered to the adjacent vegetated floodplain for infiltration and BMPs will be implemented to eliminate risk of runoff.
- Sediment containment will be completed using booms or portable rubber cofferdams. Turbid water generated by excavation below the water table will be pumped from the excavation area and discharged to the flat, vegetated floodplain.
- Work will be performed upstream to downstream and turbidity monitoring will ensure compliance with State standards.

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- Exposed soil will be stabilized within 7 days of disturbance.
- Disturbed areas will be restored and revegetation implemented using plants native to the area.
- Temporary storage piles will not be placed in the 100-year floodplain from October 1 to May 1. Storage piles used in the project within 12 hours will not be considered as temporary storage.
- Project-caused unstable slopes will be stabilized as soon as possible.
- Blasting will use barriers to keep material from entering the Sauk River.

### **Clearing and Disturbance**

- Clearing and grading will be limited to the minimum necessary to complete the project. Boundaries of clearing will be clearly marked.
- Removed debris will be disposed of at an appropriate upland location.
- No temporary access roads will be constructed in addition to the primary road corridor.

## **Implementation**

 The Applicant is responsible for Conservation Measure success to ensure desired outcomes. The Applicant will be required to monitor and maintain Conservation Measures to control erosion and sediment, reduce spills and pollution, and provide habitat protection. Failure to properly implement Conservation Measures may result in loss of all financial assistance provided for that project.

# Alternative B – East Alignment with Low Walls

### **Permits and Regulations**

 Any required in-water work along the Sauk River will be conducted according to established work windows refined in coordination with WDFW and NOAA Fisheries.

### **Project Design**

• MSE walls will be designed to blend into the landscape to the extent possible using earth-toned colors and surfaces to resemble natural stone.

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# Alternative C - DNR Road

## **Permits and Regulations**

 In-water work would be conducted according to WDFW and NOAA Fisheries work windows.

# **Project Design**

- Ravine crossings will be designed to withstand erosive storm flows by armoring the uphill side with gabions and with a sag in the road to provide high flows to pass over the road.
- Temporarily disturbed areas at stream crossings will be restored with native vegetation following construction.

# **Permits and Regulations**

- No in-water work will be conducted in the mainstem Sauk River.
- Coordination will be conducted with the Corps regarding Section 404 permit for affecting several small wetlands along the new alignment.

### **Stream Habitat and Fisheries**

• Installation of gabions in crossings of Type IV and V streams or other bank protection will be conducted outside the wetted perimeter to the extent possible.

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